



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,043	01/16/2004	Takayuki Matsui	1341.1171	6138
21171 7590 01/07/2008 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
			EXAMINER CONTINO, PAUL F	
			ART UNIT 2114	PAPER NUMBER
			MAIL DATE 01/07/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/758,043

Applicant(s)

MATSUI, TAKAYUKI

Examiner

Paul Contino

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION: Non-Final Rejection**

### ***Response to Arguments***

1. Applicant's arguments filed October 18, 2007, have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with the Applicant's arguments in the Remarks concerning the Gunderson reference as failing to anticipate the claims. The Examiner agrees that the integrity check as taught by Gunderson in column 10 lines 27-32 does not specifically detect alteration of data. However, alteration checking of the original data is disclosed in column 10 lines 37-42. This checking is done *based upon* the original data because the original data itself is being compared with the backup data to ensure that they are the same, i.e., no alteration was made. There is no limitation in the claims defining how the alteration checking is being undertaken.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 10 states checking for altered data “based solely on the original data”. If checking for alteration of data was based solely on original data and nothing else, there would be no way to determine if the original data had been altered because there is no reference to the original data. The Examiner recommends including specifics as to how the checking is being done, such as in objected to Claim 3.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gunderson (U.S. Patent No. 6,073,220).

As in claims 1, 6, and 8, Gunderson discloses an apparatus, method, and instructions, respectively, comprising:

a back-up unit that copies original data from an original data storage unit to a back-up storage unit as back-up data without checking alteration of the original data (*column 10 lines 21-43, where original data is stored on a primary drive and copied to a backup drive; no alteration checking is done during the time of data copying*) and

an alteration checking unit that, after copying of the original data as the back-up data is over, decides whether the original data has been altered based on original data stored in the original data storage unit and notifies a user of decide alteration (*column 10 lines 28-29 and 38-43, where the integrity checks compare original data to the back-up data and notify a user upon detection of a change in data*).

As in claim 4, Gunderson discloses a restoration unit that restores original data when the alteration deciding unit decides that the original data has been altered, based on latest original data corresponding to the original data to be restored from the back-up storage unit (*Fig. 5 #s 30b and 25; column 11 lines 8-20, where as a result of comparison and determination that files have changed on the original data primary drive, restoration is accomplished by copying data from the backup to the primary drive*).

As in claim 10, Gunderson discloses an apparatus, method, and instructions, respectively, comprising:

a back-up unit that copies original data without checking alteration of the original data (*column 10 lines 21-43, where original data is stored on a primary drive and copied to a backup drive; no alteration checking is done during the time of data copying*) and

an alteration checking unit that, after copying of the original data is completed, determines whether the original data has been altered based solely on the original data provides a notification regarding whether the original data has been altered (*column 10 lines 28-29 and 38-43, where the integrity checks compare original data to the back-up data and notify a user upon detection of a change in data*).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunderson in view of Fisher et al. (U.S. Patent No. 5,943,688).

As in claim 2, Gunderson teaches of an alteration checking unit. However, Gunderson fails to teach of a list storing unit relating to successfully copied data. Fisher et al. teaches of writing information in a list storing unit relating to original data that have been copied successfully as the back-up data and relating to original data that are decided to be not altered (*column 5 lines 56-60 and column 7 lines 51-54, where database 40 stores information related to successfully copied data*).

\* \* \*

5. Claims 5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunderson in view of Dinker et al. (PGPub 2004/0066741).

As in claims 5, 7, and 9, Gunderson teaches of original data in an original data storage unit, a back-up unit, and copying between the two units. However, Gunderson fails to teach of denying access to the units during back-up. Dinker et al. teaches of a request processing unit that denies access to the original data in the original data storage unit while back-up unit is copying the original data (*paragraph [0040] lines 5-7, paragraph [0041] lines 11-13, and paragraph [0044] lines 6-7, where locking of the original data storage unit data store where data is being copied from denies access to the original data during back-up*) and that allows access to the original data in the original data storage unit while the alteration deciding unit is deciding whether the original data has been altered (*paragraph [0044] lines 12-15, where releasing of the lock of an original data store storage unit allows access to the original data after a back-up occurs*).

It would have been obvious to a person skilled in the art at the time the invention was made to have included the access denial as taught by Dinker et al. in the invention of Gunderson. This would have been obvious because denying access to original data preserves the data being copied and allows for a more efficient copying of data (*Dinker et al.: paragraph [0040] last 4 lines*).

*Allowable Subject Matter*

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 is allowable based upon the limitations involving checking if data has been altered **each time an access request occurs**, and additionally adding information to the list storing unit **indicating original data has not been altered**. When read within the remainder of the limitations of the claim, including the base claim, claim 3 is allowable over the prior art.

*Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Contino whose telephone number is (571) 272-3657. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2114

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFC  
12/28/2007



SCOTT BADERMAN  
SUPERVISORY PATENT EXAMINER